

**GENERAL  
TENS  
INFORMATION**

Federal law (USA) restricts this device to sale by or on the order of a physician.

### **Indications**

Transcutaneous Electrical Nerve Stimulation (TENS) may be used, with a physician's prescription, for the symptomatic relief and management of chronic (long term) pain and for the treatment of postoperative or posttraumatic pain.

### **Contraindications**

- Patients with implanted electronic devices (for example, a pacemaker) or metallic implants should not undertake TENS treatment without first consulting a physician.
- Any electrode placement that applies current to the carotid sinus (neck) region.
- Any electrode placement that causes current to flow transcerebrally (through the head).
- The use of TENS whenever pain symptoms are undiagnosed, until etiology is determined.

## **WARNINGS AND PRECAUTIONS**

### **Warning**

- TENS devices must be kept out of reach of children.
- The safety of TENS devices for use during pregnancy or delivery has not been established.
- TENS is not effective for pain of central origin (headaches).
- If TENS treatment becomes ineffective or unpleasant, stimulation should be discontinued until reevaluation by a physician.
- Avoid adjusting controls while operating machinery or vehicles.
- Always turn the TENS device off before applying or removing electrodes.
- TENS may interfere with electronic monitoring equipment (ECG monitors/alarms).
- Electrodes should not be placed over the eyes, in the mouth or internally.
- TENS devices have no curative value.

- TENS is a symptomatic treatment and as such suppresses the sensation of pain which would otherwise serve as a protective mechanism.

## **INTRODUCTION TO TENS**

### **What is Pain?**

Pain is the body's warning system. Pain is important because it signals an unusual condition in the body and alerts us before additional damage or injury can occur. However, long-lasting, persistent pain, often called chronic pain, once diagnosed serves no apparent purpose. TENS is developed to help relieve some types of chronic and acute pain.

### **How does TENS work?**

TENS is a method of treating pain that is non-invasive and non-narcotic. The TENS device sends comfortable impulses through the skin that stimulate the nerve (or nerves) in the treatment area. In many cases this stimulation will greatly reduce or eliminate the pain sensation you feel by masking the original pain message sent to the brain.

It is also believed that TENS stimulation helps release endorphins into the blood stream thereby further reducing pain.

TENS devices are clinically proven useful in pain management for many patients. By reading this manual and carefully follow the treatment instructions given to you by your clinician, you will attain the maximum benefit from your TENS device.

## **CONNECTING THE TENS DEVICE**

### **1. Prepare the Skin**

Prepare the skin as previously discussed and according to instructions provided with your electrodes. Before attaching the electrodes, identify the area which your clinician has recommended for electrode placement.

### **2. Connect lead wires to the electrodes.**

Connect the lead wires to the electrodes before applying the electrodes to the skin.

**Note: Be sure both intensity controls for Channel 1 and 2 are turned to the “OFF” position.**

3. Place Electrodes on Skin

Place the electrodes on the skin as recommended by your clinician.

4. Insert Lead Wire Connector to TENS Device

### **ATTACHING THE LEAD WIRES**

The lead wires provided with the TENS device insert into the jack sockets located on top of the unit. Holding the insulated portion of the connector, push the plug end of the wire into one of the jacks; one or two sets of the wires may be used. After connecting the wires to the stimulator, attach each wire to the electrode.

Lead wire provided with the TENS device are compliant with mandatory compliance standards set forth by FDA.

**Note: Use care when you plug and unplug the wires. Pulling on the lead wire instead of its insulated connector may cause wire breakage.**

**Caution: Never insert the plug of the lead wire into an AC power supply socket.**

Plug end of lead wire into the channel output receptacle to be used, pushing plug in as far as it will go.

5. Select Treatment Settings

Check and be sure your unit is still set to the proper setting recommended by your physician.

6. Adjusting Channel Intensity Control

Locate the intensity control knob at the top of the unit. Turn channel 1 or 2 clockwise. The indicator light will light up as long as the unit is in operation. Slowly turn the channel control in a clockwise direction until you reach the intensity recommended by your medical professional. Repeat for the other channel if both channels are to be used.

## **Mode Functions**

**Burst (B)** releases individual bursts twice per second, pulse width is adjustable and the pulse rate is set at 100Hz per second.

**Continuous (C)** stimulation is delivered continuously at the settings determined by intensity, rate, and width knobs.

**Modulation (M)** pulse width decrease from its setting by 60% and maintain the decreased width for 2 seconds before returning to the original width setting, which is maintained for 3.5 seconds. The cycle is then repeated. The intensity and pulse rate are adjustable.

If the stimulation levels are uncomfortable or become uncomfortable, reduce the stimulation amplitude to a comfortable level or cease stimulation and contact your physician if problems persist.

## **ELECTRODE SELECTION AND CARE**

Your physician should decide which type of electrode is best for your condition.

Follow application procedures outlined in electrode packaging to maintain stimulation and prevent skin irritation.

The electrode packaging will provide instructions for care, maintenance and proper storage of your electrodes.

## **TIPS FOR SKIN CARE**

Good skin care is important for comfortable use of your TENS device.

- Always clean the electrode site with mild soap and water solution, rinse well, and blot dry thoroughly prior to any electrode application.
- Any excess hair should be clipped, not shaved, to ensure good electrode contact with skin.
- You may choose to use a skin treatment or preparation that is recommended by your physician. Apply, let dry, and apply electrode as directed. This will both reduce the chance of skin irritation and extend the life of your electrodes.

- Avoid excessive stretching of the skin when applying electrodes. This is best accomplished by applying the electrode and smoothly pressing it in place from the center outward.
- When removing electrodes, always remove by pulling it the direction of hair growth.
- It may be helpful to rub skin lotion on electrode placement area when not wearing electrodes.
- Isolated cases of skin irritations may occur at the site of electrode placement during long term application.
- Effectiveness is highly dependent upon patient election by a person qualified in the management of pain patients.
- Skin irritation and electrode burns are potential adverse reactions.

## **TROUBLESHOOTING**

If the TENS device does not function properly:

1. Make sure the battery is properly installed or replace battery. Be sure to observe properly polarity markings when replacing the battery. If the yellow light on the front of the unit does not stay lit when the unit is turned on, replace the battery and check again.
2. If the ON/OFF indicator light is flashing and you still feel no stimulation, check that the lead wires are properly connected and the electrodes are in place. If the unit appears to be functioning and no stimulation, the lead wires or electrodes may need to be replaced.
3. If the battery appears to be charged and the unit is not functioning, turn both intensity control knobs to the OFF position (counter clockwise). Then gradually turn the intensity control knob to the ON position.

If there is any other problem, please consult or return the device to your distributor. Do not try to repair a defective device.

## **CARING FOR YOUR TENS DEVICE**

Your TENS device may be cleaned by wiping gently with a damp cloth moistened with mild soap and water. Never immerse the device in water or other liquids.

Wipe lead wires with a damp cloth as above if they become soiled.

To properly store the TENS device for extended period of time, remove the battery from the unit. Put the unit and accessories in the carrying case and store in a cool dry location.

## **TENS UNIT GUIDE**

Rate 120-150

Width 40-60

M – Modulated

Time of Wear Schedule – off twice as long as it is on

Do not wear longer than 1hr at a time.

ON	OFF
----	-----

15	30
----	----

30	1hr
----	-----

1hr	2hr
-----	-----

Turn Units off even if it shuts off by itself – may drain batteries.



Cross channel 1 and channel 2

Center of the x should be over the area that hurts

Red and Black doesn't matter, only that Ch1 crosses Ch2

Store electrodes properly